

TRAFFIC ASSIGNMENT

FOR

T.H. 101 - S.P. 7005-32

T.H. 13 - S.P. 7001-25

E. C.L. of Shakopee to 0.21 miles
W. of W. C.L. of Savage

PLANNING SURVEY UNIT FILE 3203

Prepared: July, 1962

MINNESOTA HIGHWAY DEPARTMENT

PLANNING AND PROGRAMMING DIVISION

PLANNING RESEARCH SECTION

IN COOPERATION WITH THE

U.S. BUREAU OF PUBLIC ROADS

HIGHWAY - Planning & Programming

D. T. Burns
Attn: F. Baker

July 13, 1962

Johan Nygaard

T.H. 101-13, S.P. 7005-32, 7001-25, E. C.L. of Shakopee to 0.21
miles W. of W. C.L. of Savage

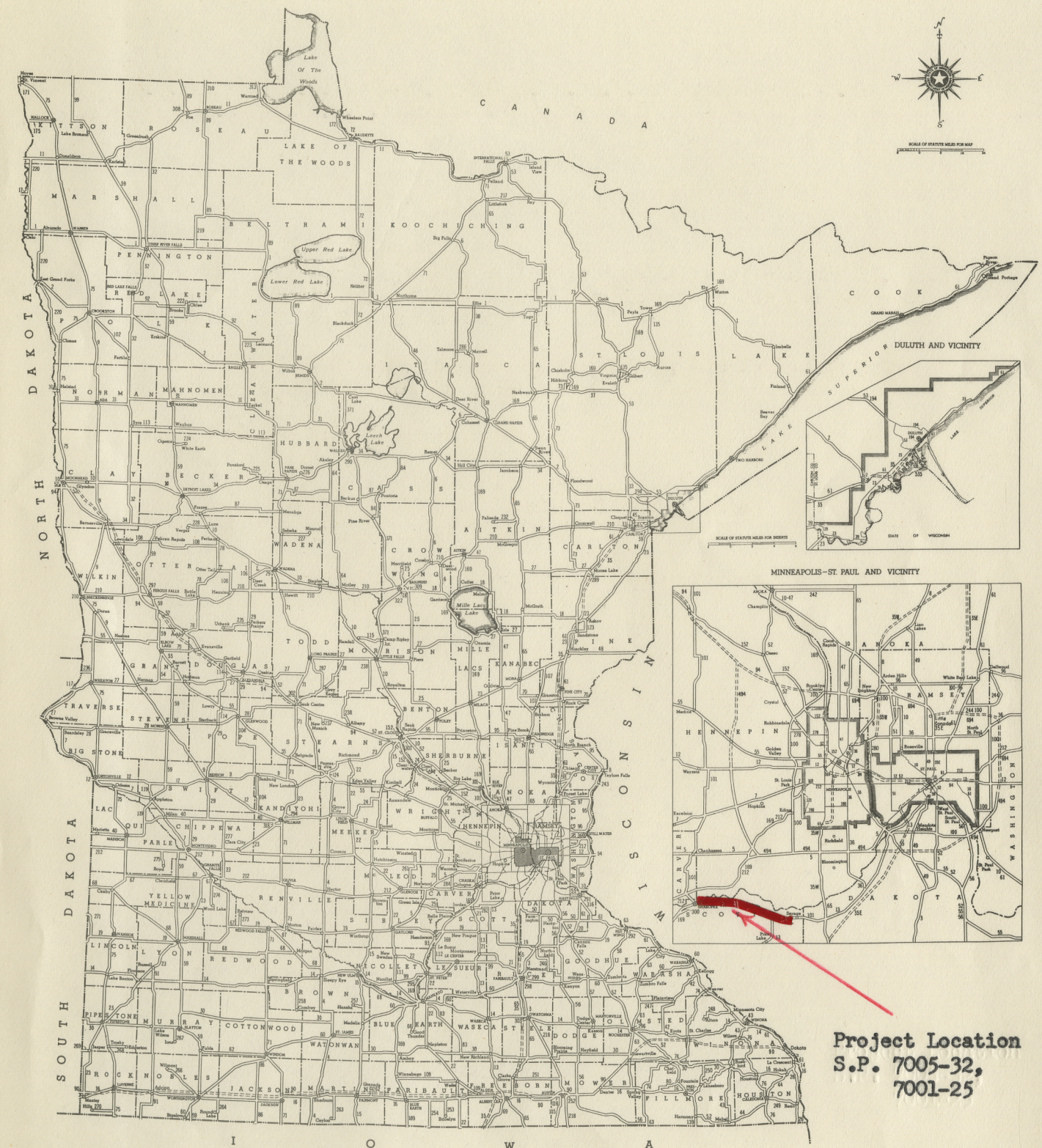
The attached report is submitted in response to your February 13, 1962
request for 1982 ADT, DHV and HCADT by vehicle type for the project
location shown on the map on page 2.

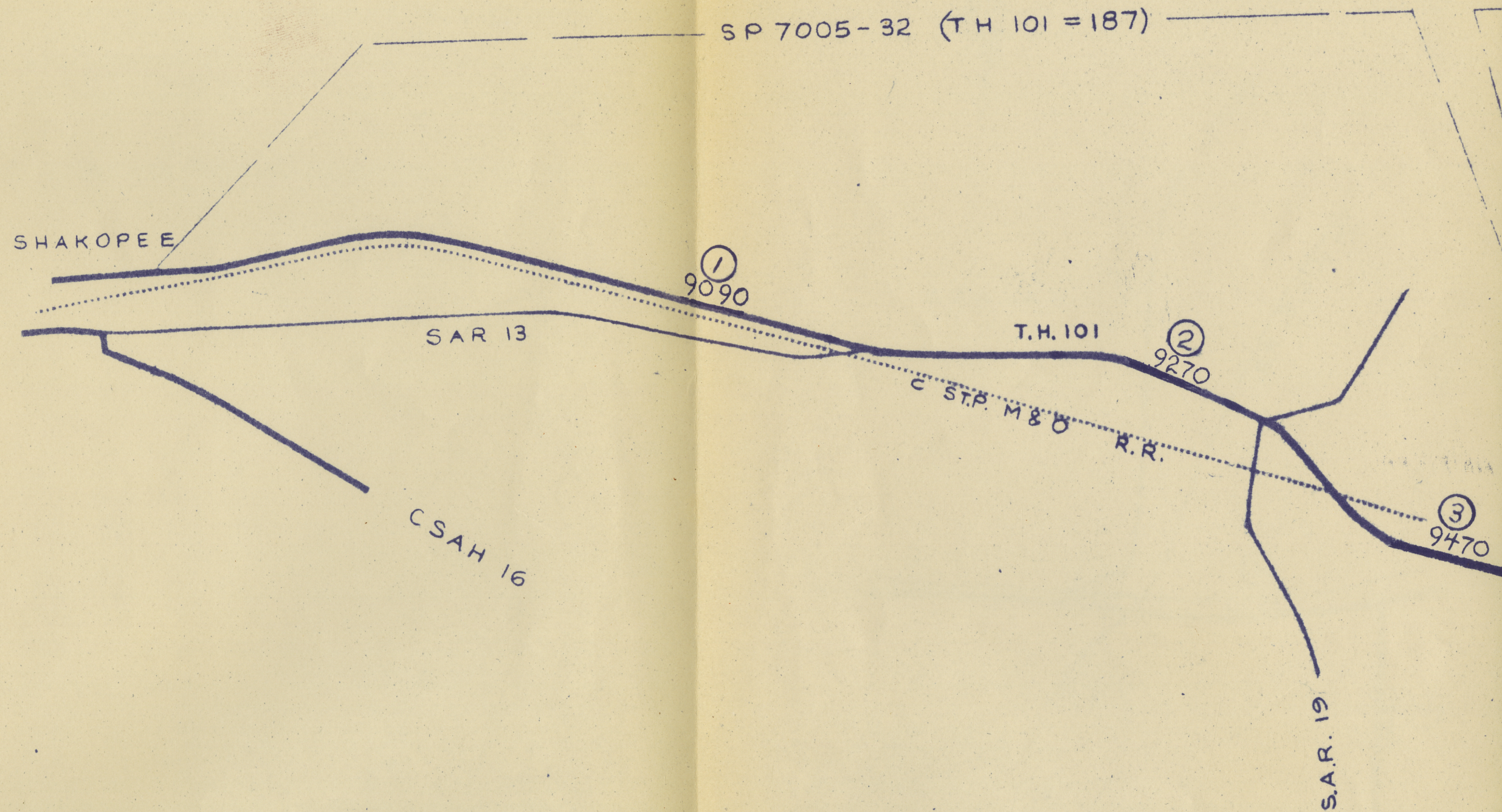
For each segment numbered on the map on page 3, the following data
are tabulated on the form on page 4:

- a) Vehicle Type Distribution
- b) Total ADT
- c) Total Heavy Commercial ADT
- d) Total DHV Without Directional Distribution
- e) Directional Distribution of DHV

Basic data, method and assumptions required to prepare the 1982
traffic estimate are presented on page 5.

JN:bb
Attach.
BB





(T.H. 13)
S.P. 7001-25



TWP. RD.

M.N. & S. R.R.

SAVAGE

(4)

14590

(5)

5680

T.H. 13

T.H. 101 AND 13
EAST VILLAGE LIMITS OF SHAKOPEE
TO 0.21 MILES WEST OF
WEST VILLAGE LIMITS OF SAVAGE

LEGEND
Segment Numbers 1
1982 ADT 13,340

TRAFFIC ESTIMATE DATA

Design Year 1982 Part 1 of 1

FOR

T.H. 101 & 13 S.P. 7005-32 & 7001-25 Length 8.05 Miles
County Scott Location E. C.L. of Shakopee to
0.21 Mi. W. of W. C.L. of Savage

BASED ON

1982 ADT from Planning Survey Unit

SHOWING

Total ADT on Segments 1 through 5 as
Defined on attached Index Map

VEHICLE * TYPE	Segment Number									
	1	2	3	4	5					
0	7502	7666	7846	12670	5369					
1	440	448	458	586	134					
2	142	144	148	170	23					
3	28	28	28	44	17					
4	410	412	414	468	57					
5	516	518	520	558	40					
6	52	54	56	94	40					
Total ADT	9090	9270	9470	14590	5680					
Total H. Comm. ADT	1588	1604	1624	1920	311					
Total DHV	1200	1220	1250	1930	700					
Directional Distribution	60-40	60-40	60-40	60-40	60-40					

- * Vehicle Type Code
- 0 = Passenger cars and 4 tire trucks
 - 1 = Single unit - 2 axle - 6 tire trucks
 - 2 = Single unit - 3 axle trucks
 - 3 = Tractor-truck or Semi-trailer - 3 axles
 - 4 = Tractor-truck or semi-trailer - 4 axles
 - 5 = Tractor-truck or semi-trailer - 5 axles
 - 6 = Buses and trucks with trailer

Basic Data, Method and Assumptions

A interview sample of westbound motorists traveling T.H. 101 just east of Shakopee was obtained during March of 1962. All vehicle origins were summarized and grouped into the following four categories:

- 1) Trips from Bloomington, Scott County and south-eastern Minnesota which were expected to continue using T.H. 101.
- 2) Trips originating west of Minneapolis and in northwestern Minnesota which were expected to use T.H. 169 rather than T.H. 101.
- 3) Trips from St. Paul, West St. Paul, South St. Paul, Mendota, Washington County and Wisconsin which were expected to use T.H. 494 to the junction of T.H. 35E and then travel either T.H. 35E, T.H. 13 and T.H. 101 or T.H. 494 and T.H. 169.
- 4) Trips from Minneapolis and Richfield which were expected to travel either T.H. 494 and T.H. 169 or T.H. 35W, T.H. 13 and T.H. 101.

For the above items 3 and 4, where a choice of route is available, travel time rates were established to determine relative route usage on the basis of travel time advantage. The average speeds used to determine relative travel time for each route are as follows:

- | | |
|-------------------|-------------------|
| T.H. 13 - 50 mph | T.H. 101 - 50 mph |
| T.H. 35E - 57 mph | T.H. 169 - 55 mph |
| T.H. 35W - 57 mph | T.H. 494 - 55 mph |

The standard Bureau of Public Roads traffic diversion curve was applied to the travel time data for alternate routes. Approximately 61% of the Item 3 trips, presently traveling T.H. 101, would divert to T.H. 494 and T.H. 169. Approximately 85% of the Item 4 trips, presently traveling T.H. 101, would divert to T.H. 494 and T.H. 169.

The past ten years ADT on T.H. 101 east of Shakopee was projected to 1982. Approximately 4250 of the 1982 projected trips were diverted from T.H. 101 to T.H. 494 and T.H. 169 on the basis of the previously stated travel time advantage procedure.

The vehicle type distribution was based on data derived from annual vehicle classification counts recorded on T.H. 169 south of Jordan. The DMV was obtained by relating machine counts recorded on T.H. 101 to continuous counts recorded on T.H. 169 south of Jordan.